

### REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

By way of this Amendment, new Claims 24-26 are presented for consideration. These claims are readable on elected Species I and elected Species A.

The Official Action sets for an objection to Claim 12 based on the observation that it is a substantial duplicate of Claim 2. It is true that Claims 2 and 12 both recite the third wire disposed on the proximal side from the second wire. However, Claim 2 recites that the second and third wires are joined to each other by welding, whereas Claim 12 does not contain such a recitation. It is thus believed that Claims 2 and 12 are not substantial duplicates of one another, and are acceptable in their present form.

If the undersigned has not fully understood the Examiner's concern regarding Claims 2 and 12, the Examiner is kindly asked to contact the undersigned to provide clarification so that this matter can be resolved.

With respect to the use of the terms "about" and "nearly" in various dependent claims, such terms have been deleted to advance prosecution while not surrendering claim scope as properly interpreted.

For at least the reasons set forth above, withdrawal of the claim objections is respectfully requested.

Claim 22 has been canceled to negate the claim rejections based on 35 U.S.C. § 112, second paragraph and 35 U.S.C. § 101.

As pointed out in the prior response, independent Claim 1 is directed to a guide wire comprising first and second wires that are joined to each other by welding. The first wire is disposed on the distal side of the guide wire and is fabricated of a reshapable material, while the second wire is disposed on the proximal side from the first wire and is fabricated from a pseudo-elastic alloy. The desirable attributes associated with a guide wire constructed in this manner were also discussed in the prior response.

The most recent Official Action expresses the view that U.S. Patent No. 6,001,068 to *Uchino et al.* discloses a guide wire having features similar to those recited in Claim 1. As pointed out in the prior response, the guide wire disclosed in *Uchino et al.* includes a first wire A and a second wire B. *Uchino et al.* states that the first wire A is preferably made of a super elastic alloy. As discussed in the patent, the term "super elastic alloy" refers to an alloy which, after being bent, returns to its original shape at the temperature at which it is used (i.e., the body temperature of about 37°C). The prior response pointed out that the first wire made from a reshapable metal material as recited in independent Claim 1 differs from *Uchnio et al.*'s disclosure of a super elastic alloy first wire A. Considering the interpretation set forth in the Official Action, independent Claim 1 is amended to more clearly set forth this distinction by reciting that the first wire is configured to be plastically deformed to a desired shape and maintained in the desired shape upon being bent in the desired shape by a user. This is discussed in the first full paragraph on page 15 of the present application.

The first wire A made of super elastic alloy as described in *Uchino et al.* is not configured to be plastically deformed as recited in independent Claim 1. For the

Examiner's reference, attached is a catalog distributed by the assignee of the present application describing one of their guide wires -- RADIFOCUS Guide Wire-M. Also attached is a verified translation of portions of the catalog which note that the guide wire includes a core material of super elastic alloy providing desirable kink resistance characteristics. In the portion of the catalog describing instructions for use of the guide wire, the catalog states (in the noted portion on the last page of the catalog) that reshaping the guide wire is not permitted because it can lead to damage to the guide wire. This thus supports the distinction noted above, namely that the first wire A disclosed in *Uchino et al.*, made of a super elastic alloy, is not configured to be plastically deformed in the manner recited in independent Claim 1. It is thus respectfully submitted that the claimed guide wire recited in independent Claim 1 is patentably distinguishable over the disclosure in *Uchino et al.*

New independent Claim 24 defines the guide wire in terms similar to those set forth in Claim 1. Thus, new Claim 2 is patentable over the disclosure in *Uchino et al.* for at least the same reasons discussed above.

In addition, new Claim 24 also recites the subject matter set forth in Claims 19 and 21. Thus, new independent Claim 24 recites that the guide wire includes the first wire disposed on the distal side of the guide wire and made from a reshapable metal material (configured to be plastically deformed), a spiral coil covering at least the distal end portion of the first wire, and a second wire disposed on the proximal side from the first wire and made from a pseudo-elastic alloy. Claim 24 also recites that the first and second wires are joined to each other by welding at a welded portion, with the welded portion being located on the distal side of the proximal end of the spiral coil.

The most recent Official Action addresses Claim 19, reciting the spiral coil, by noting *Uchino et al.*'s disclosure of a coil wire 66 of x-ray opaque material disposed at the distal end of the guide wire. With respect to Claim 21 reciting that the welded portion is located on the distal side of the proximal end of the spiral coil, the recent Official Action recognizes that *Uchino et al.* does not the welded portion between the first wire A and the second wire B being located distal of the proximal end of the coil 66. The Official Action thus relies upon the disclosure in *Palermo et al.*, stating that *Palermo et al.* discloses "configuring the guidewire such that the welded portion is located distal the proximal end of a spiral coil as best seen in Figure 5A." However, as discussed below in more detail, a careful reading of the disclosure in *Palermo et al.* reveals a lack disclosure of the claimed positional relationship between the proximal end of the spiral coil and the welded portion at which first and second wires are welded to one another.

*Palermo et al.* discloses a guide wire that includes a core wire defined by several tapered portions 120, 122, a neck 130 and a distal end portion 134. The guide wire also includes a fine wire coil 112 disposed about the core wire and an end cap 110 fixed to the end of the wire coil 112. *Palermo et al.* describes in column 6, lines 39-47 that a metallic ribbon 126 is soldered to the core wire at a solder joint 128 to thus secure the end cap 110 against the fine wire coil 112.

It is thus seen that what *Palermo et al.* actually discloses is connecting an end cap 110 to the core wire of the guide wire by way of a ribbon 126 that is soldered to a portion of the core wire. Considering that the guide wire shown in *Uchino et al.* does not include an end cap like *Palermo et al.*'s end cap 110, there exists no reason to employ *Palermo et al.*'s disclosure of a metallic ribbon 126 that is soldered to a

core wire to secure the end cap in position. In addition, *Palermo et al.* does not disclose that one should construct a guide wire to include first and second wires welded to one another at a welded portion in combination with a spiral coil whose proximal end is positioned such that the welded portion is on the distal side of the proximal end of the spiral coil. This deficiency is evident from the fact that *Palermo et al.*'s core wire is not comprised of first wire and a second wire welded to one another. It is thus respectfully submitted that the disclosure in *Palermo et al.* would not have motivated one of ordinary skill in the art to modify the guide wire disclosed in *Uchino et al.* to result in the guide wire construction recited in independent Claim 24.

New dependent Claims 25-27 further highlight the unrelated nature of the disclosure in *Palermo et al.* New dependent Claim 25 recites that the first and second wires are coaxial, new dependent Claim 26 recites that the proximal end face of the first wire and the distal end face of the second wire abut one another and are welded to one another to form the welded portion, and new Claim 27 recites the fixing material (e.g., the fixing material 12 illustrated in Fig. 1) that is fixed to the distal end of the spiral coil and the distal end of the first wire. In *Palermo et al.*, the metallic ribbon 126 is not coaxial with the core wire, the proximal end face of the wire ribbon 126 is not fixed to the distal end face of the core wire, and the end cap 110 is not fixed to the distal end of a first wire which is coaxial with the second wire.

For at least the reasons set forth above, early and favorable action with respect to this application is respectfully requested.

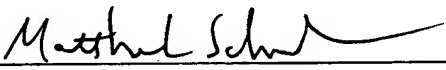
Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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